

Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) EP 1 128 657 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
29.08.2001 Bulletin 2001/35

(51) Int Cl.7: H04N 1/00

(21) Application number: 01420037.2

(22) Date of filing: 14.02.2001

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

- Touchard, Nicolas P. B.,
Kodak Ind. Dépt. Brevets
71102 Chalon sur Saone Cedex (FR)
- Seignol, Olivier L. R., Kodak Ind. Dépt. Brevets
71102 Chalon sur Saone Cedex (FR)
- Vau, Jean-Marie, Kodak Ind. Dépt. Brevets
71102 Chalon sur Saone Cedex (FR)
- McIntyre, Dale Frederick,
Eastman Kodak Company
Rochester, New York 14650 (US)

(30) Priority: 24.02.2000 FR 0002461

(71) Applicant: EASTMAN KODAK COMPANY
Rochester, New York 14650 (US)

(72) Inventors:
• Schaeffer, Pierre
Harrow HA1 4TY, Middlesex (GB)

(74) Representative: Parent, Yves
KODAK INDUSTRIE,
Département Brevets,
CRT - Zone Industrielle
71102 Chalon-sur-Saône Cedex (FR)

(54) Method for managing quick distribution of images

(57) The present invention concerns a method for managing a quick distribution of images.

The method comprises the following steps:

receiving, from a user (10), at least one image (20), the user (10) having associated a messaging system address (40) with said at least one image (20); digitizing (60) said at least one image (20) when the image is not in digital form; storing (70) said at least one image (20) on a server (80); and sending a message (100) to the messaging system address (40) associated with said at least one image giving the information that said at least one image is available on the server.

The invention is particularly advantageous when using a cellular telephone number as the messaging system address.

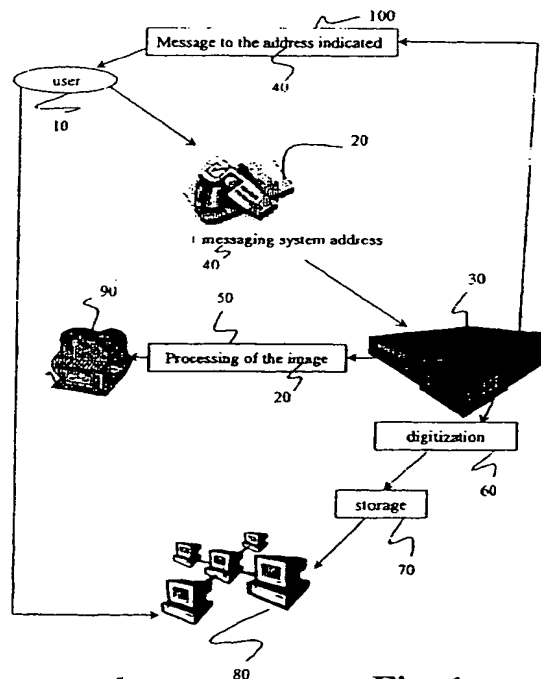


Fig. 1

BEST AVAILABLE COPY

Description**FIELD OF THE INVENTION**

[0001] The present invention concerns a method for managing a quick distribution of images.

BACKGROUND OF THE INVENTION

[0002] When a user wishes to have his photographs developed, whether from films in 24/36 format, APS format or transparencies, when he wishes to have a reprint made of a photograph already on paper or when he wishes to have an enlargement made or any other processing performed, he sends the image medium to a processing laboratory, ordering the processing he has chosen. Once the ordered processing has been carried out, the user does not receive his order immediately; this is because he must take into account the delay for dispatching to the retailer where he left his order. Moreover, if the user cannot go to the retailer, the delay in obtaining his photographs will be even longer. However, the user sometimes wishes to have an idea very quickly of the images he is going to obtain. Sometimes he also wishes to be able to send the images to his friends very quickly.

[0003] Similarly, when the user produces his photographs with a digital camera, he sometimes wishes to perform different operations, such as, for example, ordering printing at a chosen retailer, in a kiosk, or sending, to different people, one or more of his images on different types of medium or in different modified forms.

SUMMARY OF THE INVENTION

[0004] One object of the present invention is a method allowing the user, wherever he is situated, to manage quickly the distribution of images so as to give the user a very quick idea of the images he is going to obtain.

[0005] Another object of the present invention is a method allowing the user to choose very quickly and to send very quickly, to different locations, images he has chosen.

[0006] Another object of the invention is a method allowing the user very quickly to order printing of images in a chosen place.

[0007] The invention concerns a method for managing a quick distribution of images, the method comprising the steps of:

receiving, from a user, at least one image associated with a messaging system address;
digitizing said at least one image when the image is not in digital form;
storing said at least one image on a server; and
sending a message to the messaging system address associated with said at least one image giving the information that said at least one image is available on the server.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] Other characteristics will emerge from a reading of the following description, given with reference to the drawings in which:

Figure 1 depicts the steps of the method according to the invention;

Figure 2 depicts an illustration of the message sent to the user; and

Figure 3 depicts an example image distribution order.

DETAILED DESCRIPTION OF THE INVENTION

[0009] If reference is made to Figure 1, there can be seen the different steps of the method of the present invention when the image sent by the user is an image of the silver type.

[0010] "Silver images" means images which are not in electronic form, that is to say, for example, images on a 24/36 format negative, an APS format negative, a transparency, etc., or a paper print issuing from one of the preceding forms.

[0011] When a user 10 wishes to have one or more images 20 of this type processed, that is to say when he orders prints of negatives, reprints or enlargements, he sends a medium to be processed to a processing laboratory 30, for example. The laboratory 30 then receives a medium on which there is recorded at least one image 20 to be processed. The medium received by the laboratory 30 is associated with references identifying the user. According to the present invention, one of the references is a messaging system address 40 indicated by the user. The messaging system address 40 is for example an Internet type address or a fixed or cellular telephone number.

[0012] After having processed the silver images 20, the laboratory 30 digitizes the silver images 20 and stores them 70 on a data server 80. The data server is connected by a high-speed link to a storage server, not depicted, allowing connection to an Internet type network. Preferably, the storage server is connected to a WAP type gateway intended to provide communication between the network used for mobile telephony, for example GSM, and a cellular telephone. As soon as the images are stored, the laboratory 30 sends a message 100 to the messaging system address 40 associated with the medium, that is to say with the stored images 20, the message 100 giving the information that the images have been processed and that they are available on the server 80 (see Figure 2). Advantageously, the message 100 also indicates the storage address 110 of the images on the server. Thus, the user receiving the message 100 can view his images straight away by reading the file stored on the server. It is evident that, at the same time, the processed images are sent to the retailer 90 by means of whom the user sent his medium

to the laboratory.

[0013] According to a particular embodiment of the invention, the user sends digital images to a retailer or to an access provider of a telephone service, an Internet type service or some other service. The user connects his digital camera, via a computer or via a cellular telephone, to an Internet type network. The user can also upload from the flash card of the camera to the server of a kiosk or retailer.

[0014] When the messaging system address is an Internet type address, the user will receive a message by electronic mail, for example via an HTML screen, on a communication means having an Internet connection, for example a fixed or portable computer, a cellular telephone, etc. When the messaging system address is a conventional telephone number, the user will receive, for example, a voice message giving the information that the image has been processed. Advantageously, when the messaging system address is a cellular telephone number, the message is sent by the SMS (Short Message Service) technique via the mobile telephone network. The message can also comprise, besides text, an image such as for example a logo.

[0015] Advantageously, the message 100 sent to the user indicates a password 120 which is necessary to gain access to the images on the server. Thus, the images stored by the laboratory on the server will not be accessible by everyone. Advantageously, viewing of the images on the server by the user is free, that is to say it can be carried out directly by the user with no financial consideration. The only cost to the user will be the connection time to the Internet type network or the telephone communication time.

[0016] Advantageously, the message sent to the user offers different types of instruction which the user can order and which will be described later.

[0017] Once the user receives such a message 100, he can view his images straight away. Where the communication means on which he received the message 100 comprises a screen and an Internet type connection, notably in the case of a cellular telephone, he can use the same means to view his images. He can thus view them almost instantaneously, wherever he is. In the other cases, it is necessary to use another means having a screen and an Internet type connection.

[0018] The digitized images stored on the server are, for example, thumbnails, that is to say low-resolution images, for example 128 x 192 pixels in size, like those used for producing the print index supplied with photograph prints. Provision can also be made to store higher resolution images, for example 512 x 768 pixel images. Preferably, the images are stored for a limited period. Provision can be made, for example, to delete the images after a few days.

[0019] After having viewed his images, the user can send one or more instructions electronically to the laboratory via an Internet type network. The laboratory can thus receive, at 130, different types of instruction from

a user as depicted in Figure 3.

[0020] The laboratory receives for example the instruction to transmit 131 one or more images to one or more Internet type addresses or to a number of a cellular telephone equipped with a screen allowing image viewing. The image received on a cellular telephone can of course be transferred to another viewing means, for example to a larger screen than that of the telephone. In fact, if the user wishes to send several images very quickly to different people, the laboratory can manage such dispatches. Advantageously, the images sent are then the stored images having a higher resolution than the thumbnails. Thus, the people who will receive these images will have them available very quickly and very easily. The method of the invention thus makes it possible to send very quickly, to a distant person, an image chosen by the user who has taken a photograph, the image being able to be viewed on different types of screen and notably, for example, directly on an electronic picture frame such as for example a screen marketed by CEIVA™. According to an alternative of this embodiment, the laboratory can receive the instruction to electronically send modified images such as for example images in the form of a jigsaw puzzle, images in cartoon form, images inserted in a greetings card or any other type of modified image. It can also receive the instruction to electronically send an image with which there is associated a sound message such as, for example, music in the form of an MP3 type file or a voice message recorded by the user, via his telephone for example; an automatic link will then be provided between the file containing the image and that containing the music. Inserting a voice message recorded by the user or a written message in the file containing the image can also be envisaged.

[0021] The laboratory can also receive 130 the instruction from a user to send 132 one or more identical or different images on a chosen medium to a postal address. The user can in effect choose, for example, to have a paper print, whether a simple print or an enlargement, of one of his images sent to a chosen person. He can also give the instruction to send a diskette, a CD or a DVD with one or more images or any other physical image recording medium.

[0022] The laboratory is also capable of receiving 130 the instruction from a user to print 133, in a given place chosen by the user, one or more of his images. The user has the ability to order, from the laboratory, printing in a kiosk or at a retailer, for example in the kiosk closest to where the user is situated. Advantageously, where the user is using a cellular telephone, provision can be made that the user has the choice of ordering paper printing at the retailer closest to the place where he is situated. The user can himself choose the place where he wishes to print his image but this place can also be determined automatically by locating the user. This is because the user can be located by virtue of his cellular telephone by means of location techniques specific to

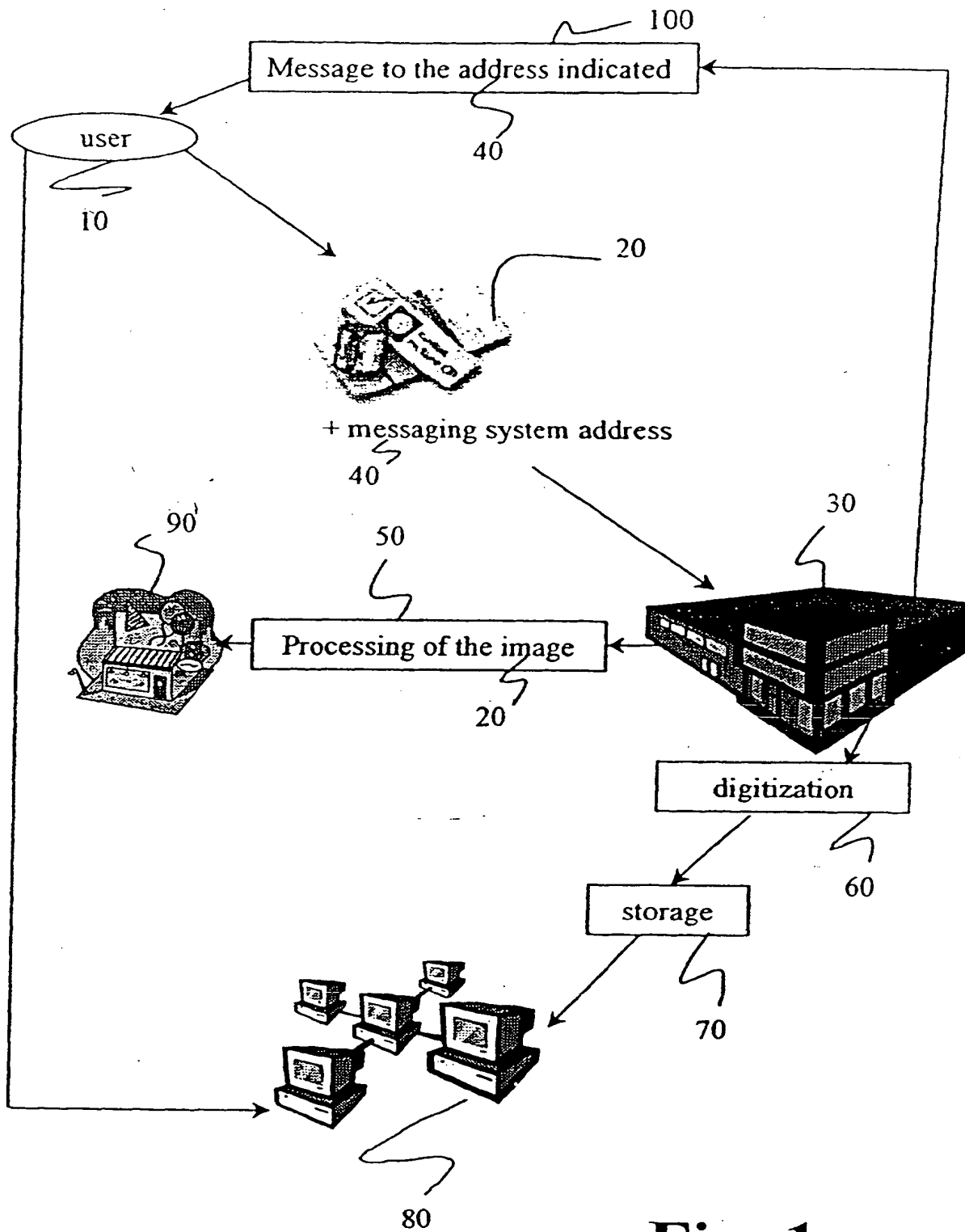


Fig. 1

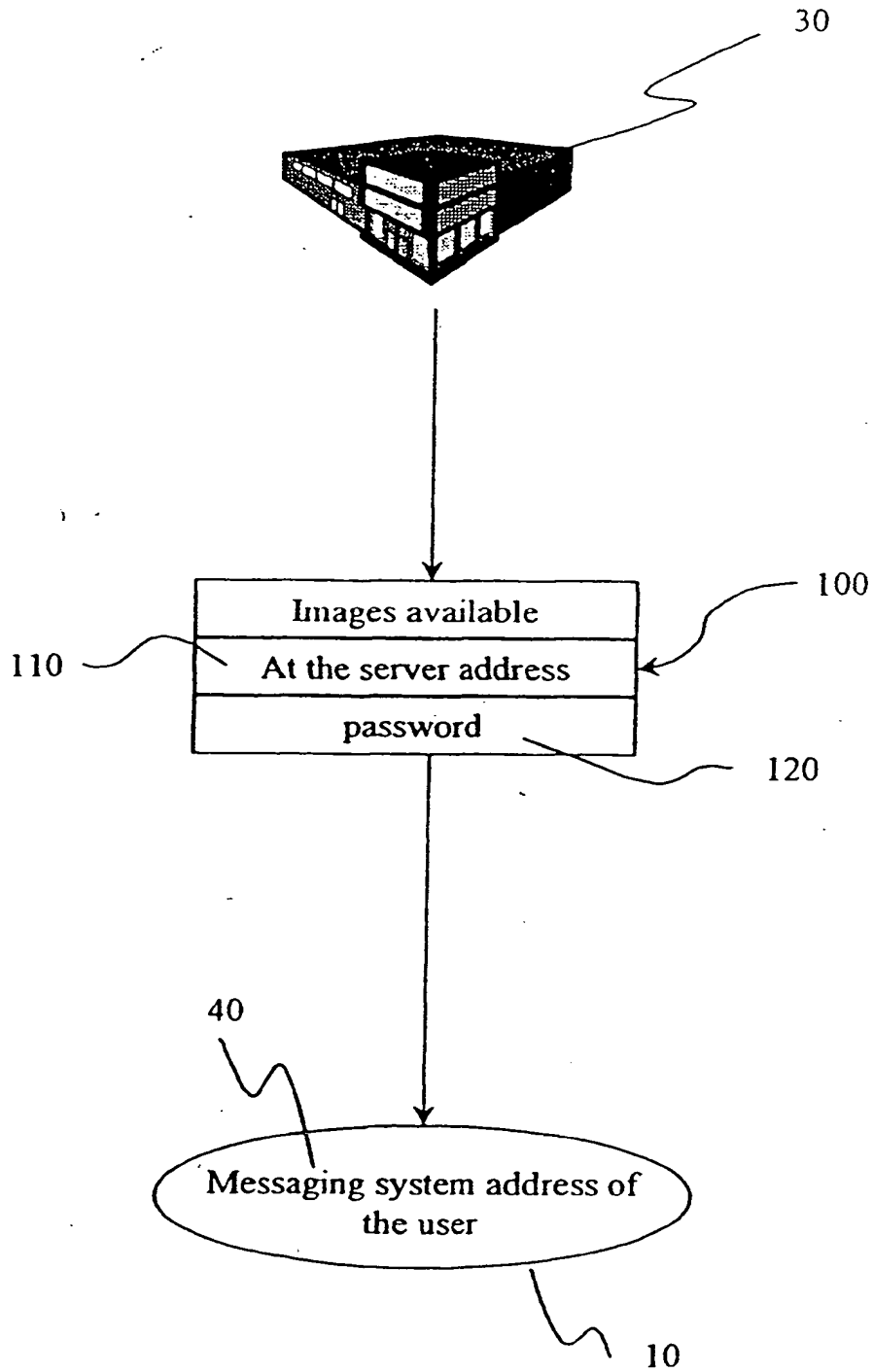


Fig. 2

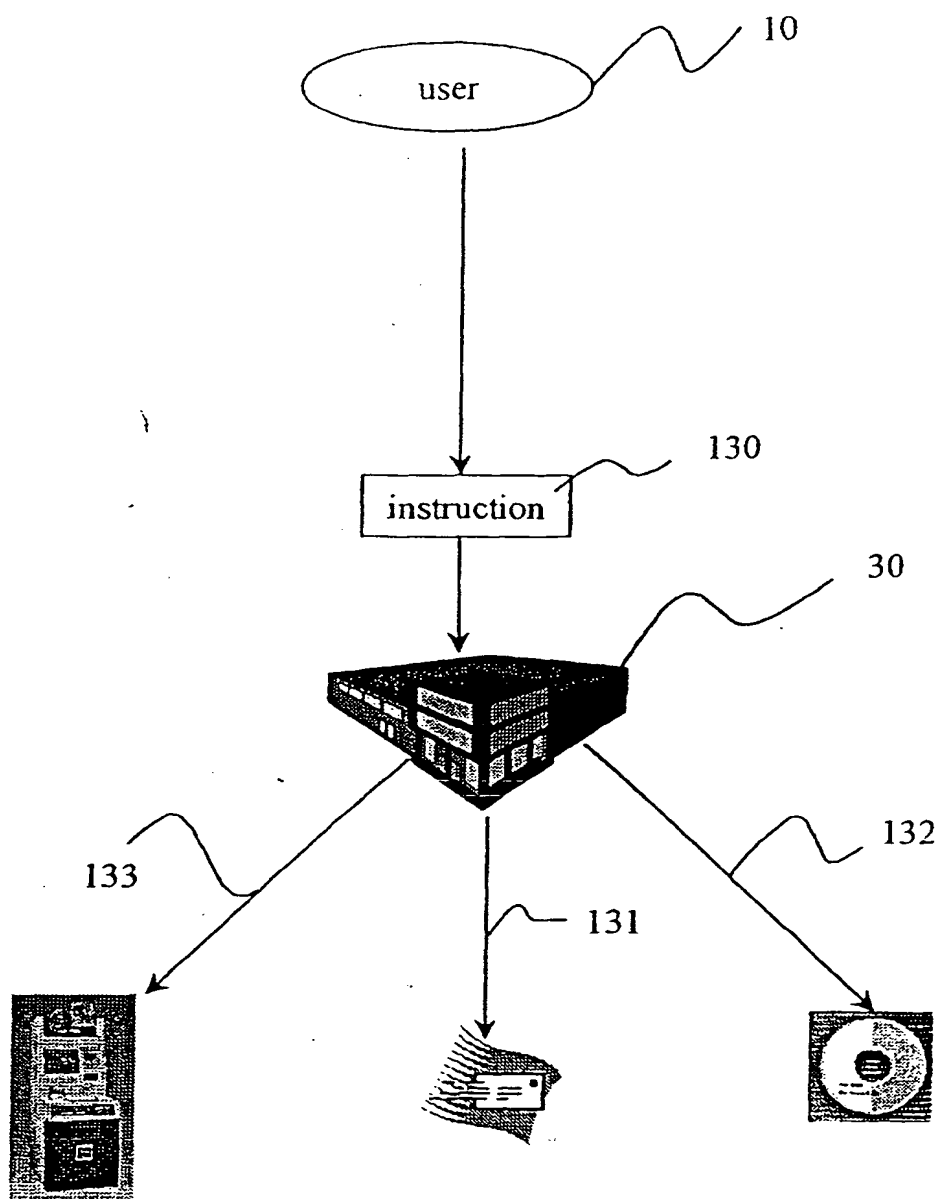


Fig. 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 42 0037

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 017 157 A (YAACOV YAACOV BEN ET AL) 25 January 2000 (2000-01-25) * column 2, line 53 - column 5, line 29; figures 38,5 * * column 6, line 56 - column 7, line 15 * * column 8, line 8 - line 35 * * column 9, line 26 - line 41 *	1-4, 8-13, 16-18	H04N1/00
X	EP 0 860 980 A (EASTMAN KODAK CO) 26 August 1998 (1998-08-26) * page 3, line 42 - page 4, line 32 * * page 4, line 44 - line 47 *	1,4,6,9, 12,13,17 3	
A	EP 0 838 767 A (FUJI PHOTO FILM CO LTD) 29 April 1998 (1998-04-29) * column 2, line 33 - column 4, line 49 *	2	
A	WO 99 17529 A (SCHAEFER RALF JOACHIM ;LAIER JOACHIM (DE); MATTES HEINZ (DE); SIEM) 8 April 1999 (1999-04-08) * page 11, line 19 - page 12, line 35; figure 5 *	1,5-7	
A	EP 0 844 781 A (FUJI PHOTO FILM CO LTD) 27 May 1998 (1998-05-27) * column 2, line 38 - column 5, line 38 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04N

Place of search

BERLIN

Date of completion of the search

5 June 2001

Examiner

Deane, E

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another
document of the same category
A : technological background
C : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or
after the filing date
D : document cited in the application
I : document cited for other reasons
& : member of the same patent family, corresponding
document

EPC FORM 1503 03.02 (P24-C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 42 0037

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-06-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 6017157	A	25-01-2000	US	6133985 A	17-10-2000
EP 0860980	A	26-08-1998	JP	10304292 A	13-11-1998
EP 0838767	A	29-04-1998	JP	10187953 A	21-07-1998
WO 9917529	A	08-04-1999	EP	1020070 A	19-07-2000
EP 0844781	A	27-05-1998	JP	10150523 A	02-06-1998

EPO FORM P2439

For more details about this annex, see Official Journal of the European Patent Office, No. 12/82

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

THIS PAGE BLANK (USPTO)